



National Science Foundation
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Dear Colleague Letter: Mathematical and Physical Sciences Community Updates, Summer 2011

Dear Members of the Mathematical and Physical Sciences Community:

I am pleased to have this opportunity to provide you with updates regarding some initiatives we are working on in the Mathematical and Physical Sciences Directorate (MPS). This is the first in a series of letters and I plan to send updates as relevant information becomes available.

MPS recently partnered with the Engineering and Biological Sciences Directorates on a Memorandum of Understanding (MOU) with the National Institute of Standards and Technology (NIST). This MOU is intended to facilitate interactions between Principal Investigators (PIs), co-PIs, post-doctoral scholars and both undergraduate and graduate students supported by NSF and scientists and engineers at NIST. NIST operates arrays of instruments, measurement systems, commercial equipment as well as specialized tools developed by NIST researchers. Researchers from industry, academia, and non-profit organizations interested in working collaboratively with NIST researchers on projects of mutual interest may access these systems as part of their research. Supplemental support to existing NSF awards may be requested in order to allow PIs, co-PIs, post-doctoral scholars and undergraduate and graduate students supported on these awards to participate in such collaborative research at NIST. A copy of the Dear Colleague Letter announcing this MOU is available at: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5665

I would also call your attention to the extension of the CI-TraCS Postdoctoral program (NSF Fellowships for Transformative Computational and Data-Enabled Science using Cyberinfrastructure), developed in partnership with the Office of Cyberinfrastructure (OCI). It enables students and recent doctoral graduates to attain the necessary multidisciplinary expertise to develop and/or effectively leverage cyberinfrastructure to benefit specific disciplines and society at large. Further information is available at: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503467

The MPS Advisory Committee has prepared several white papers finalized at their most recent meeting in April. These white papers (available at: http://www.nsf.gov/events/event_summ.jsp?cntn_id=118651&org=MPS) address several issues critical to our communities, and include the following:

- Basic Research
- Broadening Participation
- Climate Change
- Computational Science
- Data Enabled Science
- Energy
- Life Sciences
- Matter by Design
- Science and Engineering Beyond Moore's Law (SEBML)

Additionally, with respect to Cyberinfrastructure, the reports of the Advisory Committee on Cyberinfrastructure (ACCI), available at <http://www.nsf.gov/od/oci/taskforces>, may be of interest.

I look forward to providing updates about other exciting developments of interest to our community.

Best,
Ed Seidel